



**Regional Planning
Directions**

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State Commission Assessment Panel
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Dear Presiding Member and Panel Members,

**REPRESENTATION ON APPLICATION 21006593 BY SOUTHERN LAUNCH AT 94
RIGHT WHALE ROAD, SLEAFORD**

I write in response to the public notification of a development application at 94 Right Whale Road, Sleaford by Southern Launch.Space P/L (the applicant or 'Southern Launch') on behalf of Conservation Council of SA.

Context and Locality

Southern Launch is seeking to construct an orbital launch complex on leased freehold land near the southern tip of the Eyre Peninsula at Whalers Way, Sleaford.

Whalers Way is a private coastal 'reserve' subject to a heritage agreement. It offers visitors access to some of the most ruggedly beautiful coastal scenery in South Australia.

It contains habitat for two endangered bird species protected under national environmental legislation (the Southern Emu-Wren and Western Whipbird), and two other bird species of conservation significance - the White-bellied Sea Eagle (vulnerable in SA) and Eastern Osprey (rare in SA). The biodiversity of concern in the area includes marine mammals, including seals potentially be subject to noise impact as well as the local birds of conservation significance.

The Southern Launch proposal is a Major Project, other than an interim stage for the purposes of three rocket-launching tests in 2021.

The Major Project, as described in the published EIS guidelines, entails a change in land use to accommodate an aerospace facility, the construction of buildings and infrastructure to support the launch site, and the division of land in the form of a lease that exceeds five years.

According to the EIS guidelines, the proposal is anticipated to be undertaken across five stages and would include up to six launch pads, buildings (permanent and temporary), diesel and / or hydrogen fuel cell powered generators, solar arrays, water tanks, capture and treatment systems, blast walls, bunding for blast wave deflection, access tracks, storage of liquid, hybrid and solid propellants, installation of high voltage power lines, perimeter fencing and a temporary concrete batching plant.

Of the 2,640ha site, a leased area of approximately 1,200ha has been negotiated for the proposal. The proposed footprint of the complex, dispersed across the leased area, will cover approximately 100ha.

The EIS is understood to be still in preparation, though some studies mentioned but not included in the appendices of the public notification package have been completed.

Southern Launch already operates the Koonibba Test Range, an overland suborbital rocket testing facility to the west of Ceduna, described by the company as “the perfect location to launch and recover rocket and satellite technologies in the uninhabited national parks to the north”. <https://southernlaunch.space/news/2021/4/22/australias-first-people-to-lead-australia-back-to-the-stars>

The Subject Application

By virtue of a notice in the Government Gazette dated 22 April 2021, development for the purposes of establishing and carrying out three test rocket launches up until 31 December 2021 in a specified area is excluded from the ambit of the Major Project declaration.

The proposal is described as follows in the public notice:

“Change of use in land to commercial including the construction of concrete pad, contained fuel tanks, 2 x 2.2m fence and pole mounted PTZ camera associated with the Whalers Way Orbital Launch Complex Test Campaign. The proposed activity is short-term in nature for research purposes only.”

The proposal involves three tests to simulate the impact of future launches of space vehicles for operations described in the published EIS guidelines for the Whalers Way Orbital Launch Complex Major Project. This would also help demonstrate the proponent’s capabilities in a more general sense.

The Commission’s definition of the nature of development differs from that of Masterplan in a report supporting the application in the notification package.

We agree with the Commission’s interpretation that the proposal involves a change of use. We query prefer ‘commercial rocket launches’ to the term ‘commercial’ – as a commercial use is generally held to be a bank, office of a financial institution or the like. We agree that it is a change of use especially given potential for significant impact on conservation values and environmental quality.

We cannot accept the characterization of the planned tests and infrastructure as having impact as ‘trifling’ or ‘insignificant’ as asserted by Masterplan without providing adequate substantiation of that impact assessment

In the documents appended to the Masterplan report in the public notification package, use of gas guns to displace birds from a potential noise danger zone before a rocket test is mentioned as a potential measure. This is hardly indicative of a ‘trifling’ or ‘insignificant’ impact!

Southern Launch on its website states that: “We expect the noise to be as loud as a thunderclap, less than a typical rock concert, and to only last for a few seconds.”

<https://southernlaunch.space/faqs>

This is subjective. Without proper assessments of the biodiversity, noise or vibration impacts of the test launches, notwithstanding they will be of very short duration and infrequent, it is premature to conclude that the development will have only a minor impact.

The location of the on-ground facilities, though cleared of native vegetation, is elevated and visually sensitive, being within 250m of high water mark and close to a scenic route.

The proposal also involves temporary curtailment of public access to an iconic coastal destination for visitors.

We accept that if that occurs only on test days that is a minor impact, analogous to closure of a conservation/recreation area while a prescribed burn takes place.

However, while a prescribed burn is part and parcel of land management associated with an established use, development for purposes of launching three rockets is not for purposes of an existing use and constitutes a change of use.

While the development is framed in terms of a very specific research purpose relating to the EIS, the overarching purpose is a commercial rocket launching or aerospace facility involving several steps on the path to a long-term change of use, including test launches.

While decommissioning of the proposed short-term facilities is proposed, the test phase is a precursor to other development stages without sufficient discontinuity to be confidently defined as a short-term land use change.

We suggest that, notwithstanding the declared Major Project as it stands, this application has potential to establish existing use rights as a foundation for staged approvals via fresh applications, for example to vary an existing approval. The Major Project declaration is subject to variation, as occurred on 22 April 2021.

The scope of a balanced assessment we submit involves more than assessing the impact of the temporary facilities on the ground, but also the impact of the test launches on the wider locality, plus some consideration of the implications of a change of use that entails a longer-term use with more diverse and significant impacts.

This is very difficult to do based on the extremely limited information available in the public notification package.

Planning Considerations

The subject land (Allotment 101) is in the Conservation Zone (primarily) and the Caravan and Tourist Park^(L)_(SEP) Zone.

The site is in the Conservation Zone, Visitor Experience^(L)_(SEP) Sub-zone of the Conservation Zone, and following Overlays: Coastal Areas, Hazards (Bushfire - High Risk), Native Vegetation and State Significant Native Vegetation.

The coastal waters adjoining the subject land are in the Marine Parks (Managed Use) Overlay. The Prescribed Wells Area Overlay abuts the subject land to the north.

As a Performance Assessed Development, the proposal requires assessment against the relevant provisions in the Overlay, Zone and General sections of the Planning and Design Code. In the event of conflict, the Zone provisions prevail over the General, and the Overlay provisions prevail over all others.

Coastal Areas Overlay

The application, without fuller assessment of risks and impacts, has not demonstrated that it meets Desired Outcome DO 1 or Performance Outcome PO 4.1:

DO 1: The natural coastal environment (including environmentally important features such as mangroves, wetlands, saltmarsh, sand dunes, cliff tops, native vegetation, wildlife habitat, shore and estuarine areas) is conserved and enhanced,

PO 4.1: Development will not unreasonably affect the marine and onshore coastal environment by pollution, erosion, damage or depletion of physical or biological resources; interference with natural coastal processes; or the introduction of and spread of marine pests or any other means.

in terms of the impacts of noise (eg. on fauna), contamination of air, water or land, or physical disturbances associated with construction and operations, or by contributing to bushfire hazard or creating a need for modifications to the environment in order to manage or respond to any associated increase in bushfire hazard.

The test launch site is a small cleared area surrounded by native vegetation. It is extremely close to native vegetation compared with the launch pad at Koonibba – ie. metres versus some kilometres removed from areas of native vegetation.

It is within an environmentally-sensitive coastal area with significant biodiversity and thus does not satisfy PO 4.2:

Development avoids delicate or environmentally sensitive coastal areas such as sand dunes, cliff tops, estuaries, wetlands or substantially intact strata of native vegetation.

The failure to assess biodiversity impacts in documents available for public scrutiny to date means it cannot be said to have addressed or satisfied PO 4.4 either:

Development avoids, or in built up areas minimises, impacts on important habitat areas that support the nesting, breeding and movement/migration patterns of fauna, including threatened shorebirds.

With regard to public access, temporary exclusions amounting to a few days per year will only minimally conflict with PO 5.1: *Development maintains or enhances appropriate public access to and along the foreshore.*

It is submitted that a balanced assessment may also need to give consideration to potential longer-term restrictions on public access to a coastal landscape of recreational and tourism value. This may be helped by confirmation and elaboration of the following statement on the Southern Launch website:

Between launches, the public will continue to have access to Whalers Way and will only be excluded from the immediate vicinity of the fenced launch sites.

<https://southernlaunch.space/faqs>

Hazards (Bushfire - High Risk) Overlay

Nothing of substance is presented to address risk of fires potentially started by the proposed tests or affected by ancillary storage of fuels or other factors. This is a significant oversight given proximity to flammable native vegetation. There is insufficient information about the operational needs of fire management authorities and how these will be addressed. These issues are too significant to be relegated to the limited scope of an environmental management plan without upfront planning stage consideration

Having regard to the above, the following provisions cannot be said to have been demonstrably satisfied:

DO 1 Development, including land division is sited and designed to minimise the threat and impact of bushfires on life and property with regard to the following risks:

(a) potential for uncontrolled bushfire events taking into account the increased frequency and intensity of bushfires as a result of climate change

(b) high levels and exposure to ember attack

(c) impact from burning debris

(d) radiant heat

(e) likelihood and direct exposure to flames from a fire front.

PO 1.1 Development that significantly increases the potential for fire outbreak as a result of the spontaneous combustion of materials, spark generation or through the magnification and reflection of light is not located in areas of unacceptable bushfire risk.

PO 2.1 Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.

PO 6.1 Roads are designed and constructed to facilitate the safe and effective:

(a) access, operation and evacuation of fire-fighting vehicles and emergency personnel

(b) evacuation of residents, occupants and visitors.

PO 6.3 Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.

Native Vegetation Overlay

The application, without fuller details based on assessment of risks and impacts, has not demonstrated that it meets the following provisions:

DO 1 Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

PO 1.1 Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.

PO 1.2 Native vegetation clearance in association with development avoids the following:

(a) significant wildlife habitat and movement corridors

(b) rare, vulnerable or endangered plants species

(c) native vegetation that is significant because it is located in an area which has been extensively cleared

(d) native vegetation that is growing in, or in association with, a wetland environment.

The lack of information about fire risk, and potential treatment of that risk, connected with the proposal is a significant knowledge gap in terms of a complete assessment of the impacts and therefore degree to which there is conflict or accord with these provisions.

It is noted that the tests are connected with monitoring of impacts on biodiversity, specifically fauna species, which is highly suggestive of an expectation of potential impact of a kind referred to in DO 1.

State Significant Native Vegetation Areas Overlay

The application, without fuller details based on assessment of risks and impacts, has not demonstrated that it meets the following provisions:

DO 1 Protect, retain and restore significant areas of native vegetation.

PO 1.1 Development enhances biodiversity and habitat values through revegetation and avoiding native vegetation clearance except to promote an appreciation and awareness of wildlife areas, including visitor parking and amenities, or for the administration and management of a reserve or park established for the protection and conservation of wildlife.

Conservation Zone

The proposal is not for conservation or low-impact recreational and tourism purposes.

It does not enhance, and poses some risk to, the environmental and cultural values mentioned in DO 1.

Hence it is at odds with DO 1:

The conservation and enhancement of the natural environment and natural ecological processes for their ability to reduce the effects of climate change, for their historic, scientific, landscape, habitat, biodiversity, carbon storage and cultural values and provision of opportunities for the public to experience these through low-impact recreational and tourism development.

The proposal is does not substantially or demonstrably meet PO 1.1:

Small-scale, low-impact land uses that provide for the conservation and protection of the area, while allowing the public to experience these important environmental assets.

DTS/DPF 1.1 contemplates only an advertisement, camp ground, farming and public toilet in the Conservation Zone.

Further, the proposal is not a use contemplated by PO 1.2:

Development is primarily in the form of:

(a) directional, identification and/or interpretative advertisements and/or advertising hoardings for conservation management and tourist information purposes

(b) scientific monitoring structures or facilities

(c) a small-scale facility associated with the interpretation and appreciation of natural and cultural heritage such as public amenities, camping grounds, remote shelters or huts

(d) structures for conservation management purposes.

It is true that there may be scientific elements to aerospace operations, but PO 1.2 should be read in conjunction with DO 1 linking the scope of monitoring to a conservation purpose.

The proposed tests will affect an area where an endangered bird species is present with associated risk of disturbance, based on the investigations already undertaken as part of the EIS, and cannot be said to satisfy PO 3.1:

Development avoids important habitat, nesting or breeding areas or areas that are important for the movement/migration patterns of fauna.

The impacts of the proposal on visual character are partly mitigated by selection of a cleared site and proposed decommissioning of the temporary facilities. Nevertheless, the site is within 250m of the shoreline in a coastal landscape of high aesthetic value. It is also close to a scenic route, in an open space recreation area. It is therefore likely there will be some aesthetic impact.

The most directly relevant zone provision in relation to visual impact is PO 4.1:

Development is sited and designed unobtrusively to minimise the visual impact on the natural environment by:

(a) using low-reflective materials and finishes that blend with, and colours that complement, the surrounding landscape

(b) being located below hilltops and ridgelines

(c) being screened by existing vegetation.

Within the confines of the subject land, the proposal has addressed PO 4.1 though not entirely to the avoidance of impact, noting the existing low-key recreation and tourism visitation and proximity to a coastal track used for sightseeing.

The proposal for temporary facilities has to a certain degree addressed PO 4.2 and 4.4:

PO 4.2 Development is sited and designed to minimise impacts on the natural environment by:

(a) containing construction and built form within a tightly defined site boundary

(b) minimising the extent of earthworks.

PO 4.4 Development does not obscure existing public views to landscape, river or seascape features and is not visibly prominent from key public vantage points, including public roads or car parking areas.

However, establishing a use that is a precursor to an aerospace development of greater scope than described in the public notification package could accentuate conflict with the above Conservation Zone and other provisions, over and above any temporary impacts.

Visitor Experience Subzone

The proposal is not for tourism in a conservation area as envisaged by DO 1:

Tourist accommodation within a conservation area complements visitor experiences, and is located, sited and designed to minimise detrimental impacts on the natural environment and natural ecological processes including their historic, scientific, landscape, habitat, biodiversity and cultural values,

Nor is it intended for any of the uses specified in PO 1.1:

A range of tourism, conservation and recreational land uses that provide an experience to visitors, while minimising environmental impacts.

DTS/DPF 1.1 Development comprises one or more of the following:

- (a) a land use listed in Conservation Zone*
- (b) Tourist accommodation*
- (c) Shop*

General Provisions

Design

The application, without fuller details based on assessment of risks and impacts, has not demonstrated that it sufficiently meets DO 1:

Development is:

(a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area

(b) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors

(c) durable - fit for purpose, adaptable and long lasting

(d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

While selection of a cleared site avoids a direct need for clearance of native vegetation, 'sustainable' and 'sustainable techniques' invoke a need to apply the precautionary

principle in relation to other potential impacts on biodiversity, noting that biodiversity conservation is integral to the concepts of sustainability and sustainable development.

Because the public notification package lacks a proper assessment of biodiversity values potentially impacted and the nature of the potential impacts, and potential remedies, the proposal cannot be said to satisfy this Desired Outcome.

Infrastructure and Renewable Energy Facilities

The proposal will establish infrastructure and require access, including for fire-fighting potentially, and has not demonstrably responded adequately to hazard issues, eg. bushfire-related, an expectation of DO 1:

Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.

Visual amenity aspects are discussed above (and are also addressed by PO 2.1).

Interface between Land Uses

While addressed in the Masterplan report, there is still insufficient detail to properly assess and comment on impact on sensitive receivers.

See also *Activities Generating Noise or Vibration* below.

Activities Generating Noise or Vibration

There is insufficient information to assess these impacts. The published EIS guidelines for the Major Project require expert assessments of noise and vibration. The proposal for testing in 2021 logically involves launches reflective of noise generation as part of the scope of the Major Project (if intended to be valid tests). The absence of expert noise advice to support assessment and notification of the subject application is therefore a significant omission, noting that the location is remote from larger settlements but is in a conservation area and zone where there could be related biodiversity impacts, in addition to a need to protect sensitive receivers defined by the Code.

It would seem that the type of launches proposed may not be unprecedented or novel in South Australia given the launches that reportedly have occurred at Koonibba.

Open Space and Recreation

DO1

Pleasant, functional and accessible open space and recreation facilities are provided at State, regional, district, neighbourhood and local levels for active and passive recreation, biodiversity, community health, urban cooling, tree canopy cover, visual amenity, gathering spaces, wildlife and waterway corridors, and a range of other functions and at a range of sizes that reflect the purpose of that open space.

Whalers Way, though privately-owned, has served as a recreational open space as well as tourism asset including catering for fishing, sightseeing, bush camping and immersive nature experiences.

A mixed-use scenario involving an emerging operational aerospace facility will inevitably involve some loss of the special qualities of a recreation experience in an area remote from significant biophysical and aesthetic disturbance, with relatively few alternatives existing elsewhere in a rugged and spectacular coastal landscape.

Tourism Development

DO1 Tourism development is built in locations that cater to the needs of visitors and positively contributes to South Australia's visitor economy.

PO1.1 Tourism development complements and contributes to local, natural, cultural or historical context where:

(a) it supports immersive natural experiences

(b) it showcases South Australia's landscapes and produce

(c) its events and functions are connected to local food, wine and nature.

Whalers Way is a tourism asset that supports immersive natural experiences, connects people with nature, and showcases a spectacular South Australian landscape.

While rocket launching may attract visitors, the development of this area will need to be very sensitively managed to avoid an erosion of its natural tourism resources contrary to the Code's intent of promoting diverse, including nature-based tourism opportunities.

Conclusions and recommendation

The proposal is not an envisaged use or form of development within the Conservation Zone or the Visitor Experience Subzone. It also falls short of demonstrably satisfying key Overlay and general provisions as described above.

There is insufficient information to support the conclusion of the Masterplan report (in the public notification package) that the proposal sufficiently accords with the relevant provisions of the Planning and Design Code as to warrant Planning Consent.

The serious lack of expert advice and data in relation to potential noise disturbance and how that could impact species of conservation value, plus of information on bushfire prevention and management, render the application incapable of support in its present form.

The Nature Conservation Society's concerns about the research methodology, plus the implications of the proposal being a precursor to a long-term aerospace facility, and not readily able to be treated purely in isolation of that long-term use, also mean that relevant provisions of the Code may not have been adequately addressed.

The Commission should refuse the application given a high degree of variance with the relevant provisions of the Code, including the Coastal Area Overlay and Conservation Zone provisions.

Alternatively, the Commission could postpone its assessment until the applicant has addressed identified deficiencies in information, expert advice and documentation. This should include re-advertising of the proposal to allow effective participation, noting that was hampered by an absence of key information, plus a characterization of the proposal as not involving a change of use by the Masterplan report, contrary to the Commission's

description, in the public notification package.

Even the most basic preliminary information about the noise generation of the proposed test is missing, this despite launches apparently occurring at Koonibba Test Range, an overland suborbital rocket testing facility established by the applicant in SA.

Studies such as the baseline flora and fauna survey mentioned but not included in the appendices to the public notification package (or at very least relevant extracts or abridged versions) could have been included.

Should you have any questions in relation to the above, please do not hesitate to contact me on 0488 523820 or via email: jim@regionalplanningdirections.com.au

Yours faithfully

Jim Allen

CONSULTANT PLANNER – REGIONAL PLANNING DIRECTIONS